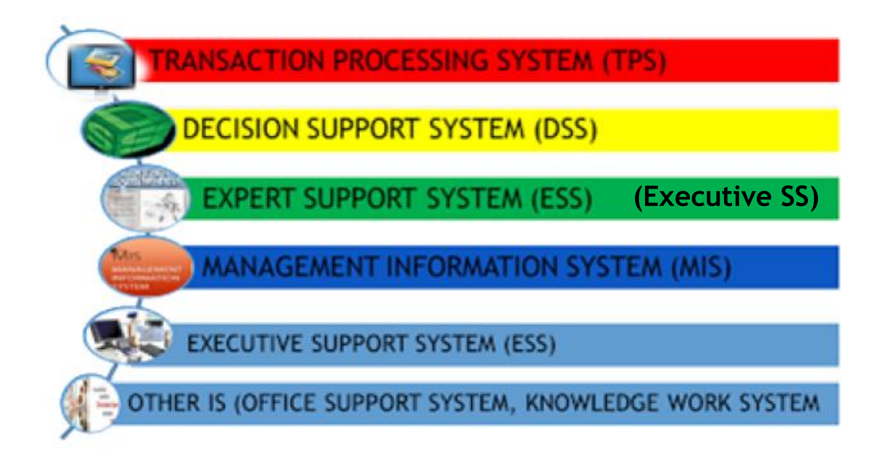
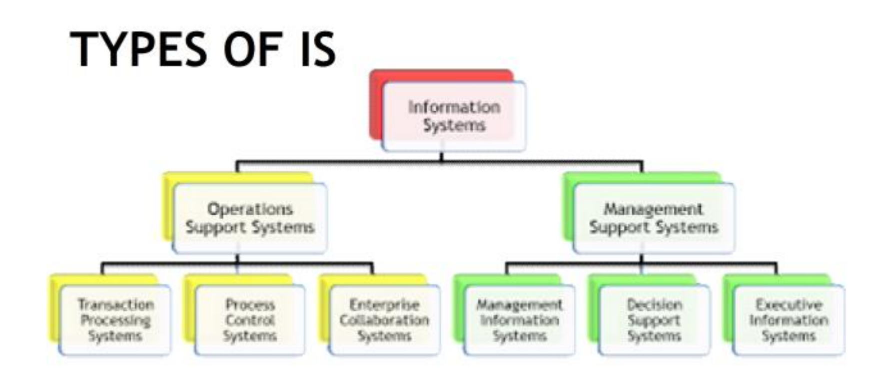
INFORMATION SYSTEMS

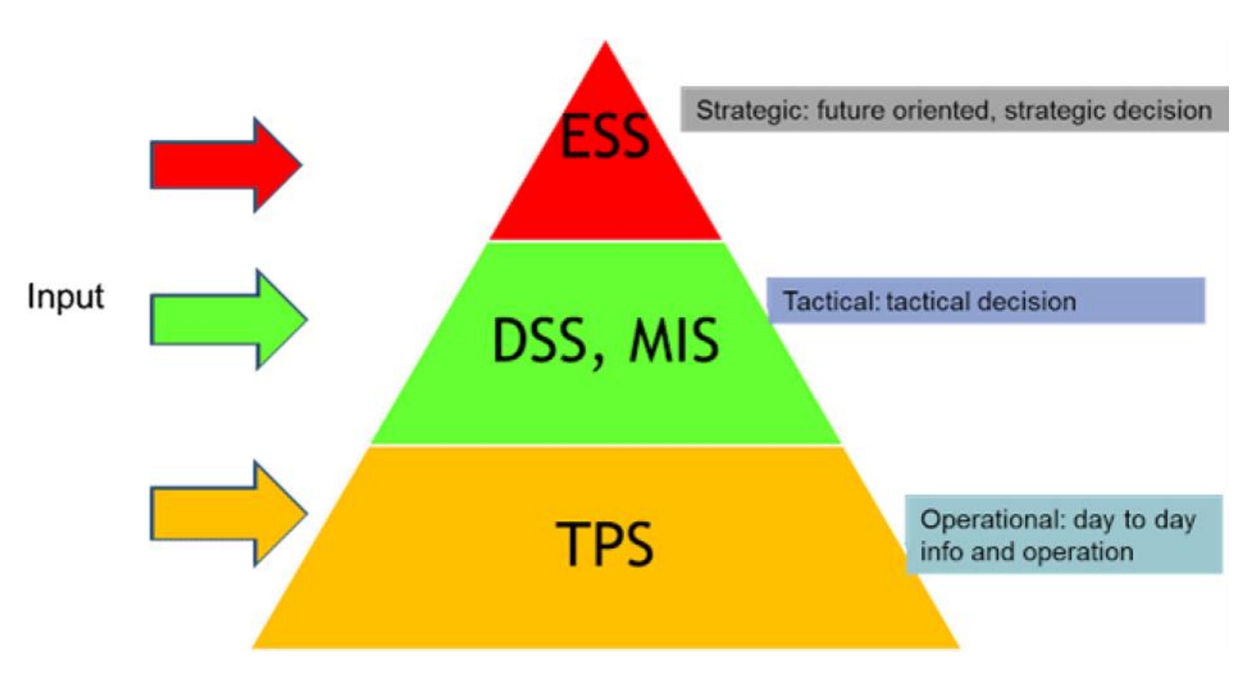
TYPES OF IS



TYPES OF IS



3 LEVELS OF INFORMATION SYSTEM



WHAT IS EIS?

EIS organizes and presents data and information from both external data sources and internal MIS or TPS in order to support and extend the inherent capabilities of senior executives.

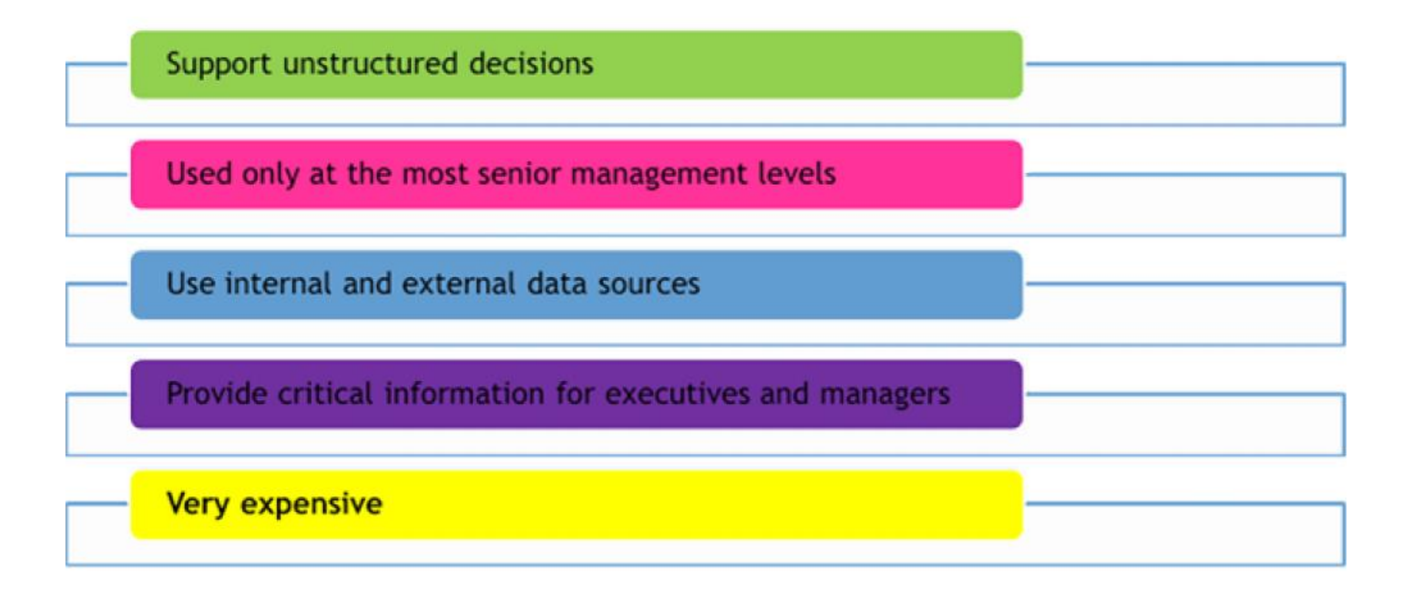
They help executives and senior managers analyse the environment in which the organization operates, to identify long-term trends, and to plan appropriate courses of action

Executive Information System are designed to be operated directly by executives without the need for intermediaries and easily tailored to the preferences of the individual using them

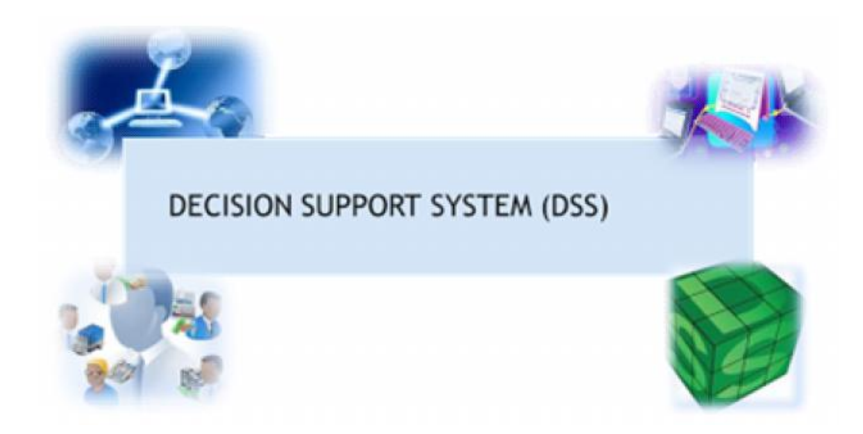
FUNCTIONS OS EIS

INPUT	PROCESSING	OUTPUTS
External data	Summarizing	Summary report
Internal Files	Simulation	Forecast
Pre-defined models	Drilling Down	Graphs/Plot

CHARACTERISTIC OF EIS



"An executive support system helps managers make strategic decisions affecting the entire company. The decisions use internal and external data to give executives the information they need to determine the proper course of action in unstructured situations"



DESICISON SUPPORT SYSTEM (DSS)

* An organized collection of people, procedures, software, databases and devices used to support problem-specific decision making.
* DSS is used when problem is complex.
* DSS are used to support unstructured or semi-structured problems that require human judgment.
* Offer the potential to generate higher profits, lower costs and better products and services.
* DSS Often based on spreadsheet software

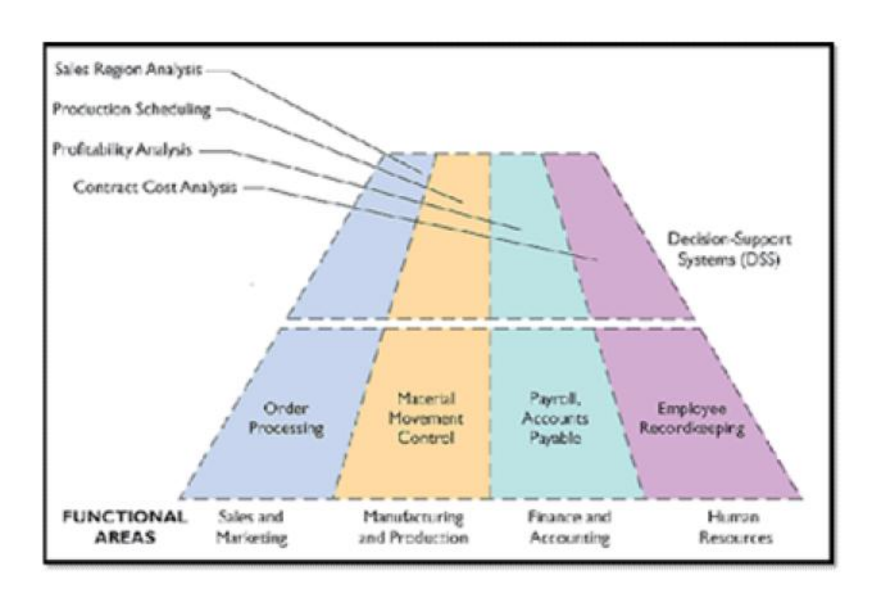
CHARACTERISTIC OF DSS





"Decision-support systems are used for complex "what-if" questions that require internal and external data. Decisions at this management level are mostly semi structured so the information system must respond to the unique requirements of the executives".

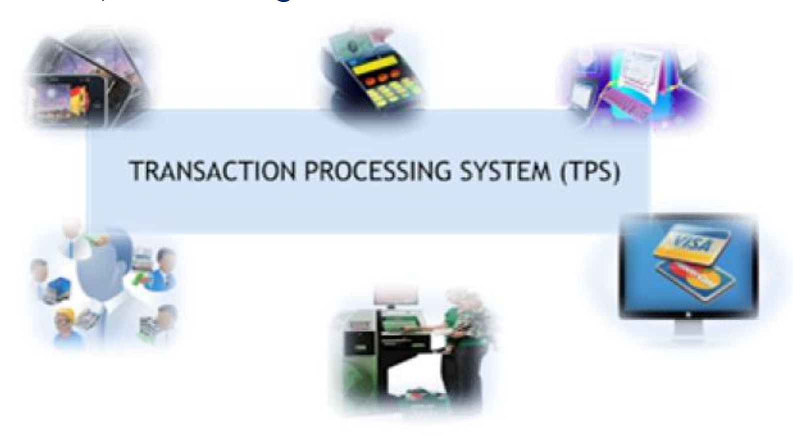
EXAMPLE OF DSS



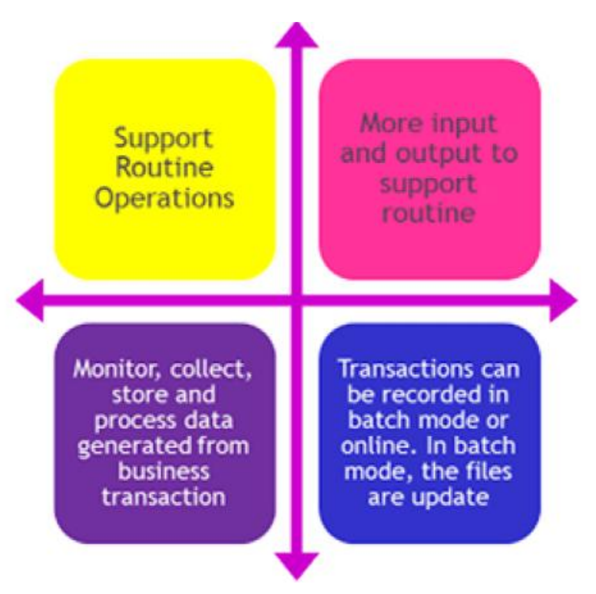
TRANSACTION PROCESSING SYSTEM (TPS)

*Information system that captures and processes data generated perform the activities associated with transaction processing, which include the following:

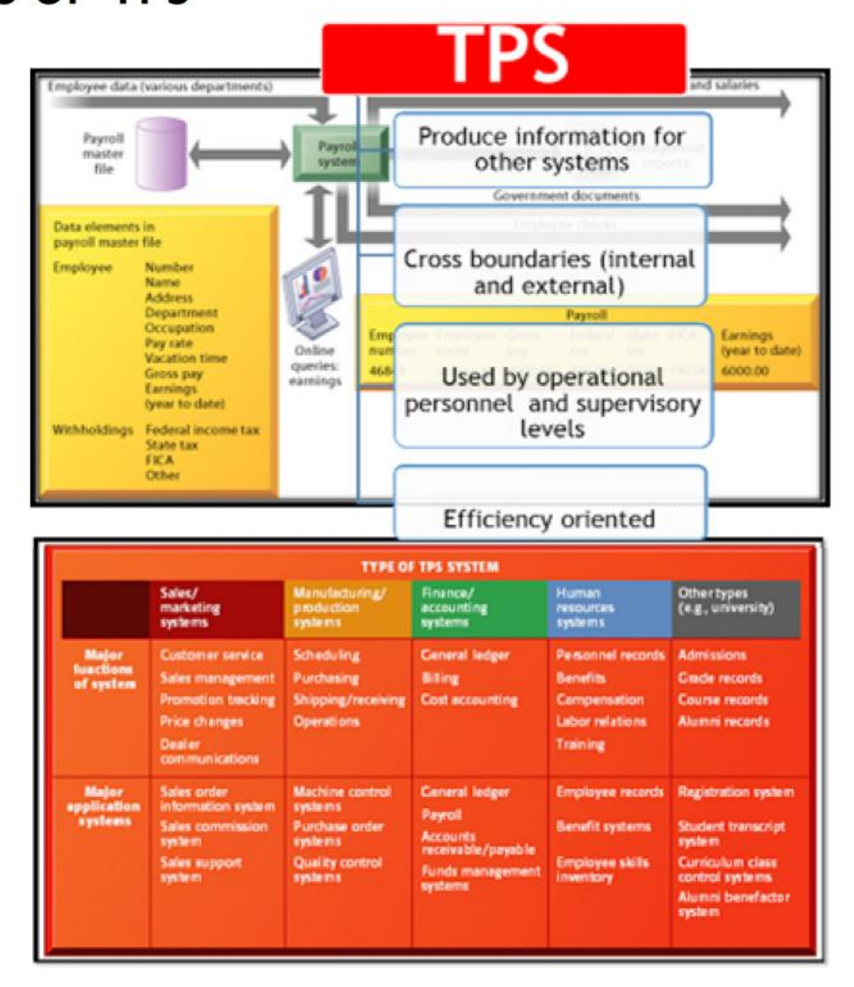
- Recording a business activity such as a student's registration, a customer's order, an employee's timecard or a client's payment.
- Confirming an action or triggering a response, such as printing a student's schedule, sending a thank-you note to a customer, generating an employee's paycheck or issuing a receipt to a client.
- Maintaining data, which involves adding new data, changing existing data, or removing unwanted data.



CHARACTERISTIC OF TPS



ROLES OF TPS



TYPE OF TPS SYSTEM

	Sales/ marketing systems	Manufacturing/ production systems	Finance/ accounting systems	Human resources systems	Other types (e.g., university)
Major functions of system	Customer service Sales management Promotion tracking Price changes Dealer communications	Scheduling Purchasing Shipping/receiving Operations	General ledger Billing Cost accounting	Personnel records Benefits Compensation Labor relations Training	Admissions Grade records Course records Alumni records
Major application systems	Sales order information system Sales commission system Sales support system	Machine control systems Purchase order systems Quality control systems	General ledger Payroll Accounts receivable/payable Funds management systems	Employee records Benefit systems Employee skills inventory	Registration system Student transcript system Curriculum class control systems Alumni benefactor system

"The transaction processing system records the data from everyday operations throughout every division or department in the organization. Each division or department is tied together through the TPS to provide useful information to management levels throughout the company".

MANAGEMENT INFORMATION SYSTEM: Overview



* is an integrated collection of people, procedures, databases and devices that provides managers and decision makers with information to help achieve organizational goals.
* Role:

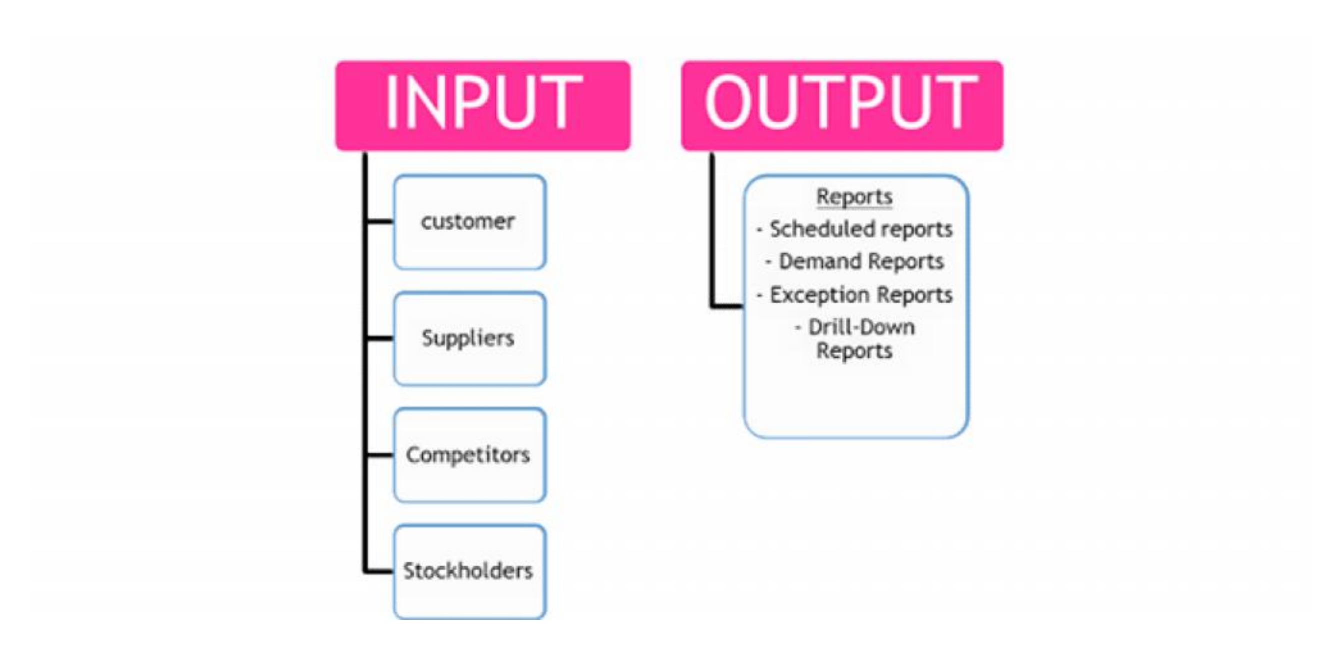
-provide the right information to the right person in the right format at the right time.

* Purpose:

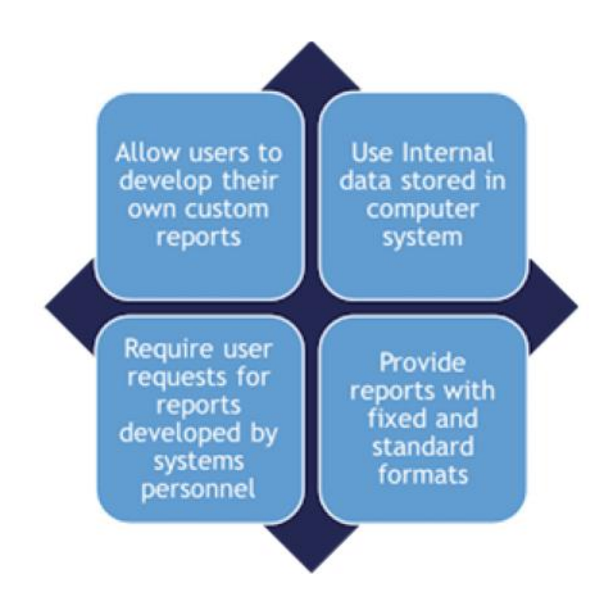
- to help an organization achieve its goal by proving managers with insight into the regular operations of the organization so that they can control, organize, and plan more effectively.

FUNCTION OF MIS

Functions of a MIS:
MIS are built on the data provided by the TPS



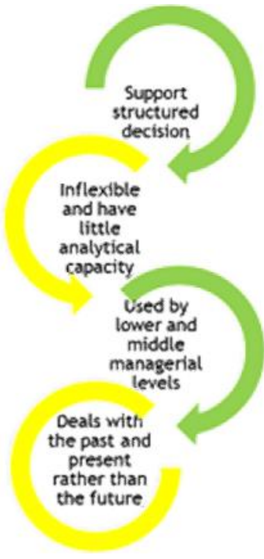
CHARACTERISTIC OF MIS



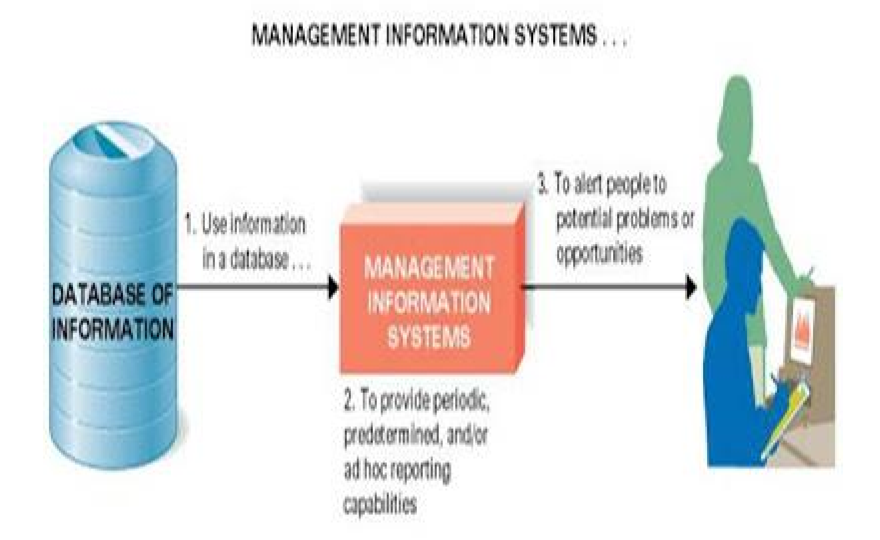
EXAMPLES OF MIS



ROLE OF MIS



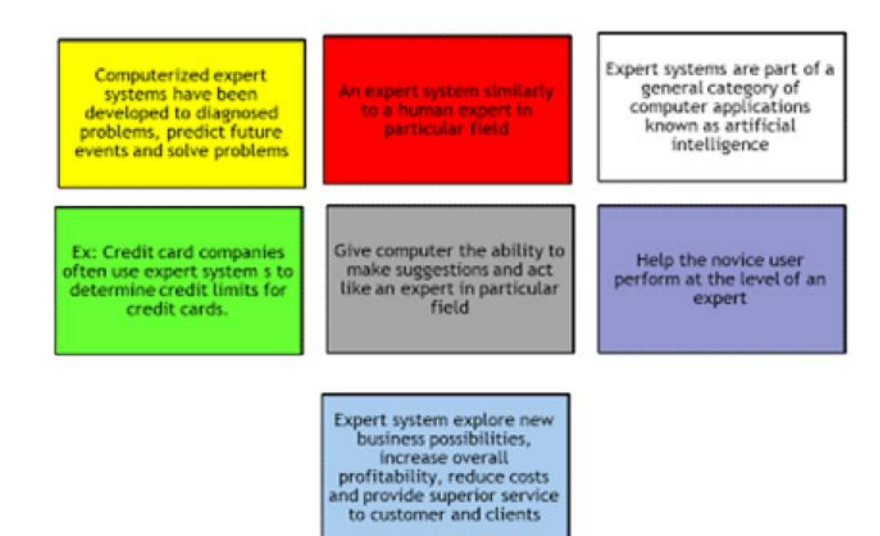
EXAMPLE OF MIS



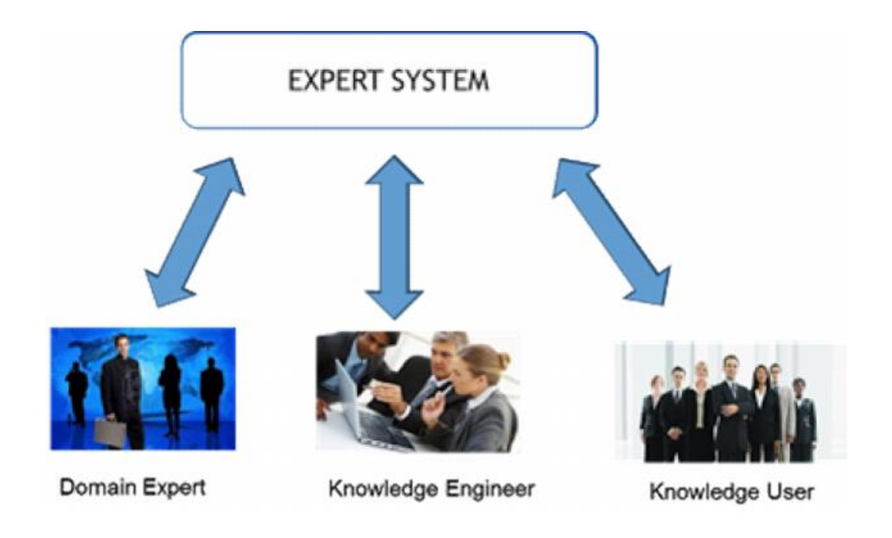
MIS Example: Using Excel to transform a data table



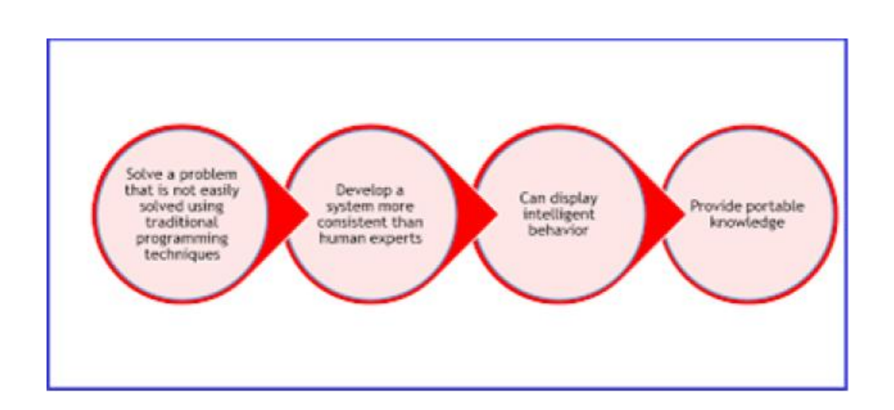
EXPERT SUPPORT SYSTEM: Overview



PARTICIPANTS IN EXPERT SYSTEMS



CHARACTERISTIC OF EXPERT SYSTEM



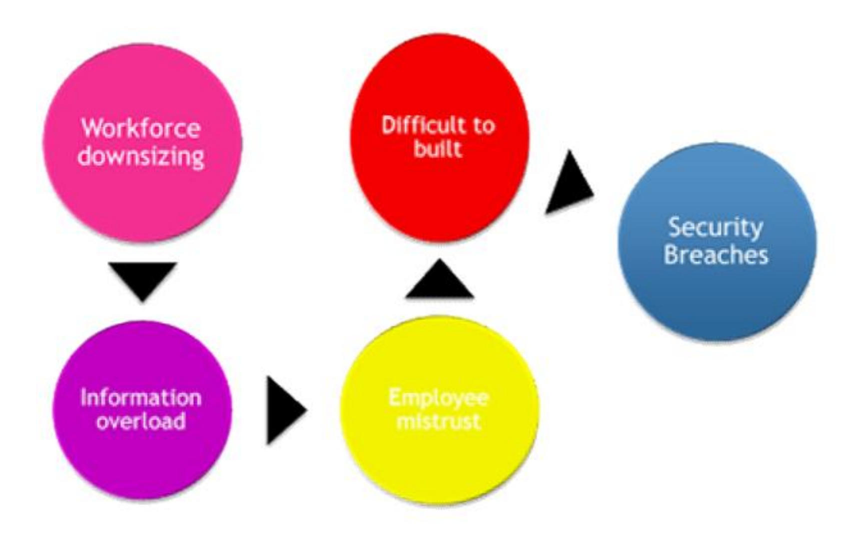
OTHER INFORMATION SYSTEM



OTHER IS: OVERVIEW

* Office Automation System:
  Office Automation system collects, processes, stores and transmits data and information in the form of electronic office communication.
* End User Computing System:
  End user computing systems support the direct, hands on use of computers by end users for operational and managerial applications.
* Business Information System:
  Business information systems support the operational and managerial applications of the basic business functions of a firm.
* Strategic Information System:
  Strategic information systems provide a firm which strategic products, services, and capabilities for competitive advantage.
* Enterprise Resource Planning:
  Software systems for businesses management encompassing modules supporting functional areas such as sales and marketing, finance, production, distribution accounting, human resource management, maintenance, inventory management, project management, transportation and e-business etc.

INFROMATION SYSTEM: CHALLENGES



INFORMATION SYSTEM: OPPORTUNITIES

